

FILE 'HOME' ENTERED AT 13:42:03 ON 19 MAY 2003

FILE 'HOME' ENTERED AT 13:42:03 ON 19 MAY 2003

L4 24 L3 AND BOVINE (P) (PARAINFLUENZA OR PIV OR PI-3) AND (NEURAMINIDASE OR HN OR FUSION OR F OR HEMAGGLUTININ (A) NEURAMINIDASE)

L8 12 L7 AND (DNA OR PLASMID) (S) (VACCINE OR IMMUNOG#### OR THERAP#
 ##### OR ANTIGEN#####)

(FILE 'HOME' ENTERED AT 13:42:03 ON 19 MAY 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 13:42:58 ON
19 MAY 2003

SEA (DNA (S) (VACCINE OR IMMUN#####)) AND (PARAINFLUENZA## OR

```

2      FILE AGRICOLA
1      FILE BIOCOMMERCE
32     FILE BIOSIS
60     FILE BIOTECHABS
60     FILE BIOTECHDS
29     FILE BIOTECHNO
11     FILE CABA
12     FILE CANCERLIT
70     FILE CAPLUS
1      FILE CEABA-VTB
1      FILE DDFU
312    FILE DGENE
9      FILE DRUGU
43     FILE EMBASE
20     FILE ESBIODASE
18*    FILE FEDRIP
1      FILE GENBANK
34     FILE IFIPAT
5      FILE JICST-EPLUS
15     FILE LIFESCI
12     FILE MEDLINE
1      FILE NIOSHTIC
7      FILE NTIS
11     FILE PASCAL
1      FILE PHARMAML
11     FILE PHIN
10     FILE PROMT
35     FILE SCISEARCH
6      FILE TOXCENTER
1026   FILE USPATFULL
23     FILE USPAT2
19     FILE VETU
30     FILE WPIDS
30     FILE WPINDEX

```

L1 QUE (DNA (S) (VACCINE OR IMMUN#####)) AND (PARAINFLUENZA## OR

FILE 'MEDLINE, CAPLUS, BIOSIS, BIOTECHNO, LIFESCI, EMBASE, 'SCISEARCH'
ENTERED AT 13:50:47 ON 19 MAY 2003

L2 236 S L1
L3 132 DUP REM L2 (104 DUPLICATES REMOVED)
L4 24 S L3 AND BOVINE (P) (PARAINFLUENZA OR PIV OR PI-3) AND (NEURA
L5 12 S L3 AND BOVINE (P) (PARAINFLUENZA OR PIV OR PI-3) AND PLASMID
L6 0 S L5 NOT L4
L7 25 S L3 NOT PY>1995
L8 12 S L7 AND (DNA OR PLASMID) (S) (VACCINE OR IMMUNOG##### OR THER
L9 11 S L8 NOT L4
L10 24 S L7 NOT L4
L11 1 S L8 AND L4

- L4 ANSWER 1 OF 24 MEDLINE
 TI Mucosal immunization of rhesus monkeys against respiratory syncytial virus subgroups A and B and human **parainfluenza** virus type 3 by using a live cDNA-derived vaccine based on a host range-attenuated **bovine parainfluenza** virus type 3 vector backbone.
 AU Schmidt Alexander C; Wenzke Daniel R; McAuliffe Josephine M; St Claire Marisa; Elkins William R; Murphy Brian R; Collins Peter L
 SO JOURNAL OF VIROLOGY, (2002 Feb) 76 (3) 1089-99.
 Journal code: 0113724. ISSN: 0022-538X.
- L4 ANSWER 2 OF 24 MEDLINE
 TI Expression of the surface glycoproteins of human **parainfluenza** virus type 3 by **bovine parainfluenza** virus type 3, a novel attenuated virus vaccine vector.
 AU Haller A A; Miller T; Mitiku M; Coelingh K
 SO JOURNAL OF VIROLOGY, (2000 Dec) 74 (24) 11626-35.
 Journal code: 0113724. ISSN: 0022-538X.
- L4 ANSWER 3 OF 24 MEDLINE
 TI **Immune** responses and protection induced by **DNA vaccines** encoding **bovine parainfluenza** virus type 3 glycoproteins.
 AU van Drunen Littel-van den Hurk S; Braun R P; Karvonen B C; King T; Yoo D; Babiuk L A
 SO VIROLOGY, (1999 Jul 20) 260 (1) 35-46.
 Journal code: 0110674. ISSN: 0042-6822.
- L4 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2003 ACS
 TI **DNA vaccines** encoding **immunogen** of pathogen of farm animals such as bovines and porcines for therapy
 IN Audonnet, Jean-Christophe Francis; Fischer, Laurent Bernard; Barzu-le-Roux, Simona
 SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 760,574.
 CODEN: USXXCO
- L4 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2003 ACS
 TI Recombinant infectious bovine rhinotracheitis virus with US2, gE and gG genes deleted for use as vaccine
 IN Cochran, Mark D.
 SO U.S., 133 pp., Cont.-in-part of U. S. 5,834,305.
 CODEN: USXXAM
- L4 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2003 ACS
 TI Improved **DNA vaccines** for livestock
 IN Audonnet, Jean-Christophe Francis; Fischer, Laurent Bernard; Barzu-le-Roux, Simona
 SO PCT Int. Appl., 79 pp.
 CODEN: PIXXD2
- L4 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2003 ACS
 TI Recombinant swinepox virus for expression of foreign antigens in vaccine preparations
 IN Cochran, Mark D.; Junker, David E.
 SO U.S., 191 pp., Cont.-in-part of Appl. No. PCT/US96/01485.
 CODEN: USXXAM
- L4 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2003 ACS
 TI Production of attenuated, human-bovine chimeric respiratory syncytial virus vaccines
 IN Buchholz, Ursula; Collins, Peter L.; Murphy, Brian R.; Whitehead, Stephen

S.; Krempf, Christine D.
SO PCT Int. Appl., 148 pp.
CODEN: PIXXD2

L4 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Attenuated human-bovine chimeric **parainfluenza** virus
vaccines
IN Schmidt, Alexander C.; Skiadopoulos, Mario H.; Collins, Peter L.; Murphy,
Brian R.; Bailly, Jane E.; Durbin, Anna P.
SO PCT Int. Appl., 150 pp.
CODEN: PIXXD2

L4 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant **parainfluenza** virus vaccines attenuated by deletion
or ablation of a non-essential gene
IN Durbin, Anna P.; Collins, Peter L.; Murphy, Brian R.
SO PCT Int. Appl., 85 pp.
CODEN: PIXXD2

L4 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI **DNA vaccine** for protecting an avian against infectious
bursal disease virus
IN Aboud-Pirak, Esther; Pirak, Michael E.; Shaoul, Esther; Monadeev, Limor
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2

L4 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Production of attenuated negative stranded RNA virus vaccines from cloned
nucleotide sequences
IN Murphy, Brian R.; Collins, Peter L.; Durbin, Anna P.; Skiadopoulos, Mario
H.
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2

L4 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant swinepox virus for expression of foreign antigens in vaccine
preparations
IN Cochran, Mark D.; Junker, David E.
SO U.S., 188 pp., Cont.-in-part of U.S. 5,382,425.
CODEN: USXXAM

L4 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Construction and characterization of a recombinant bovine Herpesvirus
vector expressing bovine viral diarrhea virus glycoprotein E2 gene and its
use as vaccines
IN Gunther, Michael
SO Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW

L4 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant bovine herpesvirus type 1 vaccines
IN Zamb, Timothy; Liang, Xiaoping; Babiuk, Lorne A.
SO U.S., 56 pp., Cont.-in-part of U.S. Ser. No. 51,448, abandoned.
CODEN: USXXAM

L4 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant swinepox virus for expression of foreign antigens in vaccine
preparations
IN Cochran, Mark D.; Junker, David E.
SO U.S., 262 pp., Cont.-in-part of U.S. Ser. No. 375,922.
CODEN: USXXAM

L4 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Polymer adjuvants for use with vector vaccines
IN Audonnet, Jean-christophe Francis; Minke, Jules Maarten
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2

L4 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant fowlpox viruses and uses thereof
IN Cochran, Mark D.; Junker, David E.
SO U.S., 61 pp.
CODEN: USXXAM

L4 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant infectious bovine rhinotracheitis virus vaccines
IN Cochran, Mark D.; MacDonald, Richard D.
SO U.S., 115 pp., Cont.-in-part of U.S. Ser. No. 732,584, abandoned.
CODEN: USXXAM

L4 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Production of attenuated **parainfluenza** virus vaccines from
cloned nucleotide sequences
IN Murphy, Brian R.; Collins, Peter L.; Durbin, Anna P.; Skiadopoulos, Mario
H.; Tao, Tao
SO PCT Int. Appl., 232 pp.
CODEN: PIXXD2

L4 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Fowlpox virus expression vectors for use in poultry vaccines
IN Cochran, Mark D.; Junker, David E.; Singer, Philip A.
SO PCT Int. Appl., 135 pp.
CODEN: PIXXD2

L4 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant swinepox virus, homology vectors for their construction, and
vaccines based on the recombinant viruses
IN Cochran, Mark D.; Junker, David E.
SO PCT Int. Appl., 339 pp.
CODEN: PIXXD2

L4 ANSWER 23 OF 24 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Compatibility of plasmids expressing different antigens in a single
DNA vaccine formulation
AU Braun R.; Babiuk L.A.; Van Drunen Littel-Van den Hurk S.
SO Journal of General Virology, (1998), 79/12 (2965-2970), 25 reference(s)
CODEN: JGVIAI ISSN: 0022-1317

L4 ANSWER 24 OF 24 LIFESCI COPYRIGHT 2003 CSA
TI Synthetic **bovine parainfluenza** virus.
AU Rice, J.M.
SO (1989) . US Cl. 424-89; Int. Cl. A61K 39/155, C07K 13/00, E12P 31/00..

L4 ANSWER 1 OF 24 MEDLINE
 AN 2002051326 MEDLINE
 DN 21635488 PubMed ID: 11773385
 TI Mucosal immunization of rhesus monkeys against respiratory syncytial virus subgroups A and B and human **parainfluenza** virus type 3 by using a live cDNA-derived vaccine based on a host range-attenuated **bovine parainfluenza** virus type 3 vector backbone.
 AU Schmidt Alexander C; Wenzke Daniel R; McAuliffe Josephine M; St Claire Marisa; Elkins William R; Murphy Brian R; Collins Peter L
 CS Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland 20892, USA.. aschmidt@niaid.nih.gov
 NC AI-000030 (NIAID)
 AI-000087 (NIAID)
 SO JOURNAL OF VIROLOGY, (2002 Feb) 76 (3) 1089-99.
 Journal code: 0113724. ISSN: 0022-538X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200202
 ED Entered STN: 20020125
 Last Updated on STN: 20020213
 Entered Medline: 20020212
 AB Reverse genetics was used to develop a two-component, trivalent live attenuated vaccine against human **parainfluenza** virus type 3 (HPIV3) and respiratory syncytial virus (RSV) subgroups A and B. The backbone for each of the two components of this vaccine was the attenuated recombinant **bovine**/human PIV3 (rB/HPIV3), a recombinant BPIV3 in which the **bovine HN** and **F** protective antigens are replaced by their HPIV3 counterparts (48). This chimera retains the well-characterized host range attenuation phenotype of BPIV3, which appears to be appropriate for immunization of young infants. The open reading frames (ORFs) for the G and **F** major protective antigens of RSV subgroup A and B were each placed under the control of PIV3 transcription signals and inserted individually or in homologous pairs as supernumerary genes in the promoter proximal position of rB/HPIV3. The level of replication of rB/HPIV3-RSV chimeric viruses in the respiratory tract of rhesus monkeys was similar to that of their parent virus rB/HPIV3, and each of the chimeras induced a robust immune response to both RSV and HPIV3. RSV-neutralizing antibody titers induced by rB/HPIV3-RSV chimeric viruses were equivalent to those induced by infection with wild-type RSV, and HPIV3-specific antibody responses were similar to, or slightly less than, after infection with the rB/HPIV3 vector itself. This study describes a novel vaccine strategy against RSV in which vaccine viruses with a common attenuated backbone, specifically rB/HPIV3 derivatives expressing the G and/or **F** major protective antigens of RSV subgroup A and of RSV subgroup B, are used to immunize by the intranasal route against RSV and HPIV3, which are the first and second most important viral agents of pediatric respiratory tract disease worldwide.

L4 ANSWER 2 OF 24 MEDLINE
 AN 2001083022 MEDLINE
 DN 20541961 PubMed ID: 11090161
 TI Expression of the surface glycoproteins of human **parainfluenza** virus type 3 by **bovine parainfluenza** virus type 3, a novel attenuated virus vaccine vector.
 AU Haller A A; Miller T; Mitiku M; Coelingh K
 CS Aviron, Mountain View, California 94043, USA.. ahaller@aviron.com

NC 1R43AI46168-01 (NIAID)
 SO JOURNAL OF VIROLOGY, (2000 Dec) 74 (24) 11626-35.
 Journal code: 0113724. ISSN: 0022-538X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200101
 ED Entered STN: 20010322
 Last Updated on STN: 20010322
 Entered Medline: 20010111

AB **Bovine parainfluenza** virus type 3 (bPIV3) is being evaluated as an intranasal vaccine for protection against human PIV3 (hPIV3). In young infants, the bPIV3 vaccine appears to be infectious, attenuated, immunogenic, and genetically stable, which are desirable characteristics for an RNA virus vector. To test the potential of the bPIV3 **vaccine** strain as a vector, an infectious **DNA** clone of bPIV3 was assembled and recombinant bPIV3 (r-bPIV3) was rescued. r-bPIV3 displayed a temperature-sensitive phenotype for growth in tissue culture at 39 degrees C and was attenuated in the lungs of Syrian golden hamsters. In order to test whether r-bPIV3 could serve as a vector, the **fusion** and **hemagglutinin-neuraminidase** genes of bPIV3 were replaced with those of hPIV3. The resulting **bovine** /human PIV3 was temperature sensitive for growth in Vero cells at 37 degrees C. The replication of **bovine**/human PIV3 was also restricted in the lungs of hamsters, albeit not as severely as was observed for r-bPIV3. Despite the attenuation phenotypes observed for r-bPIV3 and **bovine**/human PIV3, both of these viruses protected hamsters completely upon challenge with hPIV3. In summary, bPIV3 was shown to function as a virus vector that may be especially suitable for vaccination of infants and children against PIV3 and other viruses.

L4 ANSWER 3 OF 24 MEDLINE
 AN 1999335594 MEDLINE
 DN 99335594 PubMed ID: 10405354
 TI **Immune** responses and protection induced by **DNA** **vaccines** encoding **bovine parainfluenza** virus type 3 glycoproteins.

AU van Drunen Littel-van den Hurk S; Braun R P; Karvonen B C; King T; Yoo D; Babiuk L A
 CS Veterinary Infectious Disease Organization, University of Saskatchewan, 120 Veterinary Road, Saskatoon, Saskatchewan, S7N 5E3, Canada..
 vandenhurk@sask.usask.ca
 SO VIROLOGY, (1999 Jul 20) 260 (1) 35-46.
 Journal code: 0110674. ISSN: 0042-6822.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199908
 ED Entered STN: 19990910
 Last Updated on STN: 19990910
 Entered Medline: 19990824

AB This study was designed to assess the parameters influencing the magnitude and type of immune responses generated to plasmids encoding the **hemagglutinin/neuraminidase** (HN) and **fusion** (F) proteins of bovine parainfluenzavirus type 3 (BPIV3). Mice immunized with plasmids expressing HN or F under control of the Rous sarcoma virus long terminal repeat promoter were primed, but they did not develop measurable immune responses. In contrast, strong humoral and cellular immune responses were

induced with constructs containing the human cytomegalovirus immediate-early promoter and intron A. After immunization with both **HN**- and **F**-encoding plasmids, enhanced responses were observed. Analysis of in vitro protein synthesis confirmed that the presence of the intron is crucial for the expression of the BPIV3 **HN** gene. Plasmid encoding **HN** induced significantly higher serum antibody titers by intradermal injection than by intramuscular delivery, whereas antigen-specific T cell proliferation was stronger in intramuscularly injected mice. Both the isotype ratios and the cytokine profiles indicated a Th1-type response after intramuscular immunization and a mixed to Th2-type response in intradermally immunized mice. A plasmid encoding a truncated, secreted form of **HN** induced a Th2-type immune response, regardless of the route of delivery. In cotton rats, **HN**- and **F**-encoding plasmids conferred protection from BPIV3 challenge.
Copyright 1999 Academic Press.

L4 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2003 ACS

AN 2003:281961 CAPLUS

DN 138:302635

TI **DNA vaccines** encoding **immunogen** of pathogen

of farm animals such as bovines and porcines for therapy

IN Audonnet, Jean-Christophe Francis; Fischer, Laurent Bernard;
Barzu-le-Roux, Simona

PA Fr.

SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 760,574.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003068360	A1	20030410	US 2001-766442	20010119
	FR 2804028	A1	20010727	FR 2000-798	20000121
	US 2002058021	A1	20020516	US 2001-760574	20010116
PRAI	FR 2000-798	A	20000121		
	US 2000-193126P	P	20000330		
	US 2001-760574	A2	20010116		

OS MARPAT 138:302635

AB Provided is a recombinant **vaccine** comprising **immunogen** against a pathogen of a **bovine** or porcine, wherein the **DNA vaccine** or **immunogenic** compn. comprises a plasmid contg. a nucleotide sequence encoding an **immunogen** of pathogen or the **bovine** or porcine, under conditions allowing the in vivo expression of this sequence, and a cationic lipid contg. quaternary ammonium salt. The recombinant vaccine may comprises **bovine** herpes virus-1 antigen e.g. gB, gC or gD; **bovine** respiratory syncytial virus antigen e.g. **F** or G protein; **bovine** viral diarrhea virus type 1 or 2 antigen e.g. E0 or E2 protein; **bovine parainfluenza** virus type 3 antigen e.g. **HN** or **F** protein; pseudorabies virus antigen e.g. gB, gC or gD glycoprotein; or porcine reproductive respiratory syndrome virus antigen e.g. ORF3, ORF5 or ORF6 protein; or swine influenza virus HA or NA protein.

L4 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2003 ACS

AN 2002:482988 CAPLUS

DN 137:62138

TI Recombinant infectious bovine rhinotracheitis virus with US2, gE and gG genes deleted for use as vaccine

IN Cochran, Mark D.

PA Syntro Corporation, USA
 SO U.S., 133 pp., Cont.-in-part of U. S. 5,834,305.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 18

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6410033	B1	20020625	US 1996-379647	19960805
	EP 658623	A2	19950621	EP 1995-100565	19880727
	EP 658623	A3	19950927		
	R: BE, DE, FR, GB, IT, NL				
	US 5783195	A	19980721	US 1994-191866	19940204
	US 5593873	A	19970114	US 1994-247475	19940523
	US 5834305	A	19981110	US 1994-334428	19941104
	WO 9521261	A1	19950810	WO 1995-US1491	19950202
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5599544	A	19970204	US 1995-479650	19950607
	US 5804372	A	19980908	US 1996-674169	19960701
	US 6121043	A	20000919	US 1997-915520	19970815
	US 6210961	B1	20010403	US 1997-912803	19970818
PRAI	US 1987-78519	B1	19870727		
	US 1991-649380	B1	19910131		
	US 1993-37707	B1	19930325		
	US 1994-191866	A2	19940204		
	US 1994-334428	A2	19941104		
	WO 1995-US1491	W	19950202		
	US 1985-773430	A2	19850906		
	US 1986-823102	A2	19860127		
	US 1986-887140	B2	19860717		
	US 1986-902887	B2	19860902		
	US 1986-933107	B1	19861120		
	US 1988-192866	A2	19880519		
	EP 1988-907889	A3	19880727		
	US 1988-225032	A2	19880727		
	US 1991-696262	B2	19910419		
	US 1991-732584	B2	19910718		
	US 1994-247475	A1	19940523		

AB The present invention provides a recombinant infectious bovine rhinotracheitis designated S-IBR-052 (ATCC Accession No. VR 2443). The present invention also provides a vaccine which comprises an effective immunizing amt. of the recombinant infectious bovine rhinotracheitis virus designated S-IBR-052 and a suitable carrier. The present invention provides homol. vectors, methods of immunization and a method of distinguishing an animal vaccinated with the vaccines of the present invention from an animal infected with a naturally-occurring infectious bovine rhinotracheitis virus.

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:545519 CAPLUS
 DN 135:142202
 TI Improved **DNA vaccines** for livestock
 IN Audonnet, Jean-Christophe Francis; Fischer, Laurent Bernard;

Barzu-le-Roux, Simona
PA Merial, Fr.
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001052888	A2	20010726	WO 2001-FR187	20010119
	WO 2001052888	A3	20011220		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2804028	A1	20010727	FR 2000-798	20000121
	EP 1248650	A2	20021016	EP 2001-907651	20010119
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2001007767	A	20021112	BR 2001-7767	20010119
PRAI	FR 2000-798	A	20000121		
	WO 2001-FR187	W	20010119		

OS MARPAT 135:142202

AB The invention concerns a **DNA vaccine** against a pathogen affecting livestock, in particular cattle and swine, comprising a plasmid contg. a nucleotide sequence coding for an **immunogen** of a pathogen of the animal species concerned, in conditions enabling the expression in vivo of said sequence, and a cationic lipid contg. a quaternary ammonium salt, of formula $R1-O-CH_2-CH(OR1)-CH_2-N+(CH_3)_2-R_2 X^-$, wherein: R1 is a linear aliph. radical, satd. or unsatd., having 12 to 18 carbon atoms; R2 is another aliph. radical, contg. 2 or 3 carbon atoms; and X is a hydroxyl or amine group, said lipid being preferably DMRIE.

L4 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2003 ACS

AN 2001:294879 CAPLUS

DN 134:321576

TI Recombinant swinepox virus for expression of foreign antigens in vaccine preparations

IN Cochran, Mark D.; Junker, David E.

PA Syntro Corp., USA

SO U.S., 191 pp., Cont.-in-part of Appl. No. PCT/US96/01485.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6221361	B1	20010424	US 1996-686968	19960725
	US 6328975	B1	20011211	US 1995-375992	19950119
	US 6033904	A	20000307	US 1995-480640	19950607
	US 6251403	B1	20010626	US 1995-488237	19950607
	US 6497882	B1	20021224	US 1995-472679	19950607
	WO 9622363	A1	19960725	WO 1996-US1485	19960119
	W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,			

TM, TT
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
NE, SN, TD, TG

WO 9804684 A1 19980205 WO 1997-US12212 19970725

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
GN, ML, MR, NE, SN, TD, TG

AU 9737995 A1 19980220 AU 1997-37995 19970725

AU 741256 B2 20011129

EP 956343 A1 19991117 EP 1997-934946 19970725

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

NZ 333975 A 20000929 NZ 1997-333975 19970725

JP 2000513944 T2 20001024 JP 1998-508850 19970725

MX 9900844 A 20000131 MX 1999-844 19990122

KR 2000029645 A 20000525 KR 1999-700716 19990125

PRAI US 1995-375992 A2 19950119

US 1995-472679 A2 19950607

US 1995-480640 A2 19950607

US 1995-488237 A2 19950607

WO 1996-US1485 A2 19960119

US 1992-820154 A2 19920113

US 1993-97554 A2 19930722

WO 1994-US8277 A2 19940722

US 1995-375922 A2 19950119

US 1996-686968 A 19960725

WO 1997-US12212 W 19970725

AB This invention provides a recombinant swinepox virus comprising a foreign DNA inserted into a swinepox virus genomic DNA, wherein the foreign DNA is inserted into an EcoRI site within the approx. 3.2 Kb subfragment of the HindIII K fragment of the swinepox virus genomic DNA and is capable of being expressed in a swinepox virus infected host cell. The invention further provides a recombinant swinepox virus designated S-SPV-120, S-SPV-121, S-SPV-122, S-SPV-127, and S-SPV-128. The invention further provides vaccines and methods of immunization of the recombinant swinepox virus.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2003 ACS

AN 2001:50823 CAPLUS

DN 134:114831

TI Attenuated human-bovine chimeric parainfluenza virus
vaccines

IN Schmidt, Alexander C.; Skiadopoulos, Mario H.; Collins, Peter L.; Murphy,
Brian R.; Bailly, Jane E.; Durbin, Anna P.

PA United States Department of Health and Human Services, USA

SO PCT Int. Appl., 150 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001004320	A1	20010118	WO 2000-US17066	20000616

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
 CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
 ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
 LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 2000013190	A	20020716	BR 2000-13190	20000615
AU 2000056303	A5	20010130	AU 2000-56303	20000616
EP 1194564	A1	20020410	EP 2000-941614	20000616

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO

JP 2003504064	T2	20030204	JP 2001-509524	20000616
---------------	----	----------	----------------	----------

PRAI US 1999-143134P P 19990709

WO 2000-US17066 W 20000616

AB Chimeric human-bovine parainfluenza viruses (

PIVs) are infectious and attenuated in humans and other mammals and useful individually or in combination in vaccine formulations for eliciting an anti-**PIV** immune response. Also provided are isolated polynucleotide mols. and vectors incorporating a chimeric **PIV** genome or antigenome which includes a partial or complete human or **bovine PIV** "background" genome or antigenome combined or integrated with one or more heterologous gene(s) or genome segment(s) of a different **PIV**. Chimeric human-bovine **PIV** of the invention include a partial or complete "background" **PIV** genome or antigenome derived from or patterned after a human or **bovine PIV** virus combined with one or more heterologous gene(s) or genome segment(s) of a different **PIV** virus to form the human-bovine chimeric **PIV** genome or antigenome. In certain aspects of the invention, chimeric **PIV** incorporate a partial or complete human **PIV** background genome or antigenome combined with one or more heterologous gene(s) or genome segment(s) from a **bovine PIV**, whereby the resultant chimeric virus is attenuated by virtue of host-range restriction. In alternate embodiments, human-bovine chimeric **PIV** incorporate a partial or complete **bovine PIV** background genome or antigenome combined with one or more heterologous gene(s) or genome segment(s) from a human **PIV** gene that encode a human **PIV** immunogenic protein, protein domain or epitope, for example encoded by **PIV HN** and/or **F** glycoprotein gene(s) or genome segment(s). Human-bovine chimeric **PIV** of the invention are also useful as vectors for developing vaccines against other pathogens. A variety of addnl. mutations and nucleotide modifications are provided within the human-bovine chimeric **PIV** of the invention to yield desired phenotypic and structural effects.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2003 ACS
 AN 1986:419849 CAPLUS
 DN 105:19849
 TI Molecular cloning of the bovine **parainfluenza** virus type 3
 hemagglutinin **DNA** and its use in **vaccine** preparation
 IN Rice, J. M.
 PA Grace, W. R., and Co., USA
 SO Belg., 55 pp.
 CODEN: BEXXAL
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 902921	A1	19851118	BE 1985-215370	19850717
	US 4743553	A	19880510	US 1984-632106	19840718
	CN 85100949	A	19870110	CN 1985-100949	19850401
	AU 8544417	A1	19860123	AU 1985-44417	19850628
	AU 588238	B2	19890914		
	DE 3524736	A1	19860130	DE 1985-3524736	19850711
	DK 8503261	A	19860119	DK 1985-3261	19850717
	GB 2161814	A1	19860122	GB 1985-17994	19850717
	FR 2567905	A1	19860124	FR 1985-10975	19850717
	FR 2567905	B1	19880311		
	NL 8502063	A	19860217	NL 1985-2063	19850717
	ES 545299	A1	19860716	ES 1985-545299	19850717
	US 4847081	A	19890711	US 1987-14499	19870330
PRAI	US 1984-632106		19840718		

AB. A cDNA to the hemagglutinin protein of bovine **parainfluenza** virus type 3 was prepd., sequenced, and cloned. The protein isolated by this method could be used as a vaccine or in a diagnostic kit. Thus, total mRNA from virus infected host-cells was prepd. and used to prep. cDNA library in Escherichia coli. The transformants were sepd. into 6 different groups by reciprocal hybridization. Group A was identified as cDNAs encoding the nucleocapsid protein and group C as cDNAs encoding hemagglutinin by hybridization with the bovine **parainfluenza** virus and in vitro translation of mRNAs selected by the clones.

L11 ANSWER 1 OF 1 LIFESCI COPYRIGHT 2003 CSA
AN 89:17102 LIFESCI
TI Synthetic **bovine parainfluenza** virus.
AU Rice, J.M.
CS J.R. Grace & Co.-Conn., New York, NY (USA)
PI US 4847081 1989
SO (1989) . US Cl. 424-89; Int. Cl. A61K 39/155, C07K 13/00, E12P 31/00..
DT Patent
FS W; A
LA English
AB The author describes a synthetic **bovine parainfluenza**
type-3 viral hemagglutinin or structural **fusion** protein
containing an active **antigenic** site, produced by culturing a
host cell comprising a double-stranded **DNA** gene or **DNA**
fragment characterized in that it: (a) codes for a **bovine**
parainfluenza type-3 viral hemagglutinin or structural
fusion protein, and (b) is a copy of the viral RNA gene coding for
said protein. The author also describes a **vaccine** against
bovine parainfluenza type-3 virus.